

**ABSTRACT****Distance measuring device**

Distance measuring device comprising an emitter and a receiver, said  
5 emitter being arranged to produce a magnetic field by means of a  
resonant circuit having a resonant frequency, said receiver being  
arranged to pick up at said resonant frequency the magnetic field emitted  
by the emitter and convert the strength of the magnetic field picked up  
into a first signal having an energy value, said emitter being arranged to  
10 produce said magnetic field intermittently, each emission having a  
predetermined energy, said receiver being connected to a detector  
arranged to determine, by correlation of said first signal with a second  
predetermined signal having a waveform representative of a signal to be  
picked up by the receiver, a distance measurement signal representing  
15 the distance between the emitter and the receiver. The device finds its  
application in detectors for sleep disorders or other forms of illness.

**Figures 22 c and d**